IN THE CLAIMS

1) (Original) A method of allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of codecs, at least some of which utilize different amounts of DSP resources, said method including the steps of:
first determining if a particular call can be assigned to a DSP on a best fit basis, and if a call can not be assigned on a best fit basis,
assigning said particular call on a load balancing basis so as to balance the load on the plurality of DSPs.

2) (Original) A system for allocating a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of codecs, at least some of said codecs requiring different amounts of DSP resources, said system including:
means for first determining if a particular call can be assigned to a DSP on a best fit basis, and
means operable if a call can not be assigned on a best fit basis, for assigning the call on a load balance basis so as to balance the load on the plurality of DSPs.

3) (Original) A method of allocating a plurality of DSPs to handle calls in a voice gateway, said calls utilizing a plurality of different codecs, said codecs requiring a plurality of different amounts of DSP resources, said codec being arranged in resource requirement groups, the codecs in each resource requirement group requiring substantially the same amount of resources, said method including the steps of:
first determining if the call can be assigned to a DSP on a best fit basis utilizing a best fit pool which indicates the DSPs that would be fully loaded by a call using a codec in the associated resource group, and if the call can not be assigned on a best fit basis,
assigning the call to a DSP utilizing a load balancing pool which indicates the number of calls on each DSP.

4) (Original) A system for allocating a plurality of DSPs to handle calls in a voice gateway, said calls utilizing a plurality of different codecs, said codecs requiring a plurality of different amounts of DSP resources, said codec being arranged in resource requirement groups, the codecs in each resource requirement group requiring substantially the same amount of resources, said system including:

means for first determining if the call can be assigned to a DSP on a best fit basis utilizing a best fit pool which indicates the DSPs that would be fully loaded by a call using a codec in the associated resource group, and

means, operable if a call can not be assigned on a best fit basis, for assigning the call to a DSP utilizing a load balancing pool which indicates the number of calls on each DSP.

5) (Original) A method of allocating a plurality of resources to handle tasks, said tasks utilizing a plurality of different amounts of resources, said tasks being arranged in resource requirement groups, the tasks in each resource requirement group requiring substantially the same amount of resources, said method including the steps of:

first determining if a task can be assigned to a resource on a best fit basis utilizing a best fit pool which indicates the resources that would be substantially fully loaded by a task in the associated resource group, and if a task can not be assigned on a best fit basis,

assigning the task to a resource utilizing a load balancing pool which indicates the number of tasks assigned to each resource.

6) (Currently amended) The method recited in claim 3 wherein said resource requirement groups take into account which codecs have the same first channel penalty.

7) (Original) A method of allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of different codecs, at least some of said codecs requiring different amounts of DSP resources, said method including the steps of:

establishing a best fit pool which has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resource, and for each particular resource group indicating which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group,

establishing a load balancing pool which indicates the number of calls on each codec,

first determining if a particular call can be assigned to a DSP based on the information in the best fit pool, and if a call can not be assigned on a best fit basis,

assigning said particular call on a load balancing basis using the information in said load balancing pool.

8) (Original) A system for allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of different codecs, at least some of said codecs requiring different amounts of DSP resources, said system including:

a best fit pool which has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resource to handle a call, and for each particular resource group indicating which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group,

a load balancing pool which indicates the number of calls on each codec,

means for determining if a particular call can be assigned to a DSP based on the information in the best fit pool, and

means operable if a call can not be assigned on a best fit basis, for assigning said particular call on a load balancing basis using the information in said load balancing pool.

9) (Original) The method recited in claim 1 wherein said calls are assigned on a best fit basis using a best fit pool.

10) (Original) The method recited in claim 9 wherein said best fit pool has a number of codec resource groups, the codecs in each codec resource group

utilizing the same amount of DSP resource, and for each particular resource group said pool indicates which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group.

11) (Original) The method recited in claim 1 wherein said calls are assigned on a load balancing basis using a load balancing pool.

12) (Original) The method recited in claim 11 wherein said load balancing pool indicates the number of calls on each codec.

13) (Original) The method recited in claim 10 wherein the codecs in each resource group have the same first channel penalty.

14) (Original) The system recited in claim 2 wherein said calls are assigned on a best fit basis using a best fit pool.

15) (Original) The system recited in claim 14 wherein said best fit pool has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resource, and for each particular resource group said pool indicates which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group.

16) (Original) The system recited in claim 2 wherein said calls are assigned on a load balancing basis using a load balancing pool.

17) (Original) The system recited in claim 16 wherein said load balancing pool indicates the number of calls on each codec.

18) (Original) The system recited in claim 15 wherein the codecs in each resource group have the same first channel penalty.

19) (Original) The method recited in claim7 wherein said best fit pool also indicates for each particular resource group the DSPs that are executing calls

that have a first channel penalty corresponding to the first channel penalty of the codecs in the particular resource group.

20) (Original) The system recited in claim 8 wherein said best fit pool also indicates for each particular resource group the DSPs that are executing calls that have a first channel penalty corresponding to the first channel penalty of the codecs in the particular resource group.

21) (New) A computer readable medium having stored thereon sequences of instructions for allocating a plurality of resources to handle tasks, said tasks utilizing a plurality of different amounts of resources, said tasks being arranged in resource requirement groups, the tasks in each resource requirement group requiring substantially the same amount of resources, said sequences of instructions including instructions for:
first determining if a task can be assigned to a resource on a best fit basis utilizing a best fit pool which indicates the resources that would be substantially fully loaded by a task in the associated resource group, and if a task can not be assigned on a best fit basis,
assigning the task to a resource utilizing a load balancing pool which indicates the number of tasks assigned to each resource.

22) (New) A computer readable medium having stored thereon sequences of instructions for allocating a plurality of resources to handle tasks as recited in claim 21 wherein said resource requirement groups take into account which codecs have the same first channel penalty.

23) (New) A computer readable medium having stored thereon sequences of instructions for allocating a plurality of resources to handle tasks as recited in claim 21 wherein said resources are codec utilizing DSP resources.